Docket No.: 325772034700

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Hisataka FUNAKAWA et al.

Application No.: 10/799.758 Confirmation No.: 2054

Filed: March 15, 2004 Art Unit: 2625

For: IMAGE PROCESSING APPARATUS Examiner: Marcus T. Riley

APPEAL BRIEF

MS Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

As required under § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on April 15, 2010, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Konica Minolta Business Technologies, Inc.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

Application No.: 10/799,758 2 Docket No.: 325772034700

III. STATUS OF CLAIMS

A. Total Number of Claims in Application
There are 22 claims pending in application.

- B. Current Status of Claims
 - 1. Claims canceled: None
 - 2. Claims withdrawn from consideration but not canceled: None
 - 3. Claims pending: 1-22
 - 4. Claims allowed: None
 - 5. Claims rejected: 1-22
- C. Claims On Appeal

The claims on appeal are claims 1-22

IV. STATUS OF AMENDMENTS

Applicants filed an Amendment After Final Rejection on March 15, 2010. The Examiner responded to the Amendment After Final Rejection in an Advisory Action mailed April 15, 2010. In the Advisory Action, the Examiner indicated that Applicants' proposed amendment to claim 18, would not be entered.

Accordingly, the claims enclosed herein as Appendix A <u>do not</u> incorporate the amendment to claim 18.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed to an image processing apparatus for transmitting and receiving data to/from an external storage apparatus (page 3, lines 1-5; page 11, lines 3-11). The claimed system comprises "a first data acquiring unit that acquires image data" (Fig. 1, unit 120; page 9, lines 11-17; page 12, lines 1-5). The claimed apparatus further comprises "a storage unit that stores the acquired image data," i.e. the volatile memory 130 (Fig. 1, unit 130; page 9, line 25 through page 10, line 6). The claimed apparatus further comprises a "transmission unit that

transmits the acquired image data to the external apparatus so that the transmitted image data is stored in the storage apparatus thereof while the storage unit stores the acquired image data." (Fig. 1, unit 120; page 12, line 12-20; page 10, lines 16-19). The claimed apparatus further requires "a judgment unit that judges, prior to commencement of the image processing, whether the image data is stored in the storage unit" (Fig. 1, unit 120; Fig. 2, step S106; page 14, lines 4-13). The claimed apparatus further requires "a second data acquiring unit that acquires the image data from the external storage unit if the judgment unit judges negatively" (Fig. 1, unit 120; Fig. 2, step S107; page 14, line 25 through page 15, line 19). The claimed apparatus finally requires "an image processing unit that executes the image processing using the image data stored in the storage unit if the judgment unit judges positively, and executes the image processing using the image data acquired by the second data acquiring unit if the judgment unit judges negatively." (Fig. 1, unit 170; Fig. 2, step S108).

Independent claim 17 is directed to an image processing method where the process includes all the steps explained above – a first data acquiring step, a storage step, a transmission step, a judgment step, a second data acquiring step and an image processing step. (Fig. 1; Fig. 2).

Independent claim 18 is directed to a program run by the central control unit 120 (CPU) so that an image processing apparatus is operable to transmit and receive data to/from an external storage apparatus (Fig. 2: page 11. lines 15-25).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-7, 10-15, 17-21 stand rejected under 35 U.S.C. §103(a) over Ueda (U.S. Patent No. 6,538,764) in combination with Kajita (U.S. Patent No. 6,069,706). Appellants appeal this rejection.

Claims 8, 9, 16 and 22 stand rejected under 35 U.S.C. §103(a) over Ueda and Kajita in view of Iwazaki (U.S. Patent No. 6,687,742). Appellants appeal this rejection in that claims 8, 9, 16 and 22 depend from allowable claim 1 and that Iwazaki fails to overcome the deficiencies of Ueda and Kajita.

Claim 18 stand rejected under 35 U.S.C. §101. Appellants appeal this rejection.

VII. ARGUMENT

A. Claims 1-7, 10-15 and 17-21 stand rejected under 35 U.S.C. §103(a) over Ueda in combination with Kaiita.

The final rejections of claims 1-7, 10-15 and 17-21 are based entirely on the Examiner's belief that Ueda discloses all the elements in claim 1 except a transmission unit. See pages 5-6 of the outstanding Action.

The Board should reverse the outstanding rejection because Ueda, alone or in combination with Kajita, does not disclose (1) the claimed "storage unit that stores the acquired data" (2) the claimed "judgment unit that judges ... whether the image data is stored in the storage unit" or (3) the claimed "second data acquiring unit that acquires the image data from the external apparatus" as required in claims 1-7, 10-15 and 17-21.

(1) Ueda does not disclose or suggest the claimed storage unit.

The claimed storage unit of the present invention stores "the acquired image data." As shown in Fig. 1, the volatile memory 130 stores the image data that is acquired from a host computer for printing, and then the image data stored in the volatile memory 130 is subjected to printing.

On page 5 of the outstanding Action, the Examiner asserts that the claimed "storage unit that stores the *acquired image data*" corresponds to the external memory 20 shown in Fig. 1 of Ueda. However, as explained on page 8 of the Amendment filed on March 15, 2010, the external memory 20 of Ueda cannot possibly correspond to the claimed storage unit because it does not store the "acquired image data."

Ueda does not disclose or suggest that the image data acquired from the host computer 1500 is stored into the external memory 20, whereas the claimed storage unit must "store the acquired image data" as explained above. In fact, Ueda does not store any portion of the acquired image data, either in its original form or in the converted form of the intermediate codes, in the external memory 20. The recitation in column 4, lines 38-52 of Ueda cited by the Examiner in relation to the storage unit does not even mention the external memory 20 because the memory 20 is completely unrelated to the function of storing the "acquired image data."

(2) Ueda does not disclose or suggest the claimed judgment unit.

The claimed judgment unit "judges, prior to commencement of the image processing, whether the image data is stored in the storage unit." As shown in Fig. 1, the judgment unit, which is included in the central control unit 120 of the claimed printing apparatus, judges whether the desired image data for printing is currently stored in the storage unit – i.e. the volatile memory 130. If it judges that the desired image data exists in the volatile memory 130, the printing system immediately process that data for printing. If it judges that the desired image data does not exist in the volatile memory 130. I, the central control unit 120 commands a retrieval of that data from the external storage apparatus – the mail server 200.

On page 6 of the outstanding Action, the Examiner states Ueda discloses this claimed "judgment unit that judges ... whether the *image data* is stored in the storage unit" by the first judging means of Ueda (Ueda, CPU 12). However, as explained on page 9 of the Amendment filed on March 15, 2010, the first judging means of Ueda cannot possibly correspond to the claimed judgment unit of the present invention because it does not determine whether "the image data" is stored in the storage unit.

The first judging means of Ueda determines whether the intermediate code memory 501 has overflowed with the one-page intermediate code information, rather than whether "the image data" that is currently desired by the printing system for printing is stored in the storage unit. In other words, the first judging means of Ueda only functions as a checking mechanism whether the intermediate code memory 501 is full or not, whereas the claimed judgment unit functions as a comparison mechanism whether the stored information in the storage unit corresponds to "the image data" that is currently desired by the printing system. Without an ability to compare what is stored in the storage unit to "the image data" desired for printing, the first judging means of Ueda cannot correspond to the claimed judgment unit.

(3) Ueda does not disclose or suggest the claimed second data acquiring unit.

The claimed second data acquiring unit must "acquire the image data from the external apparatus if the judgment unit judges negatively." As shown in Fig. 2, the claimed second data acquiring unit – i.e. the central control unit 120 – acquires the image data from the external storage apparatus when the desired image data is missing in the volatile memory 130. Thus, when the image data is erased due to a power failure, the claimed second data acquiring unit of the present invention can still retrieve the missing image data from the external apparatus and process the retrieved image data for image forming and printing.

On page 6 of the outstanding Action, the Examiner states Ueda discloses this claimed "second data acquiring unit that acquires the *image data* from the *external* apparatus" by CPU 1 (Ueda, Fig. 1) because the CPU 1 acquires the "memory-full" status from the printer 2500 when it is expected that the processing of the printing information to be transferred from the host computer 1500 may fail. However, as explained in the Amendment filed on March 15, 2010, this Examiner's argument is incorrect. The CPU 1 of Ueda does not acquire "the image data" from the "external" apparatus as required by the claimed second data acquiring unit.

The CPU 1 of the host computer 2500 of Ueda does not acquire "the image data", but only the "memory-full" status notification whereas the claimed second data acquiring unit must acquire "the image data." In fact, the CPU 1 is not a data-acquiring unit, but data-transmitting unit as part of the host computer 2500. A structure that only sends the image data cannot possibly correspond to the claimed second "data acquiring" unit.

Even the memory-full status notification that the CPU 1 of the host computer 2500 acquires is not from the "external" storage apparatus as required by the claimed second data acquiring unit of the present invention. The claimed second data acquiring unit must acquire the image data from the "external apparatus" – i.e. the mail server 200 – which is external to the printing apparatus. The "external apparatus" is external to the printing apparatus because that feature is what allows this present invention to survive a power failure in the printing apparatus.

¹ The data can be erased from the volatile memory 130 during a power failure or the data might not have been stored in the volatile memory 130 to begin with if the volatile memory 130 was full at the time of the receipt of the data. See naces 14-15 and naces 32 of the Specification.

However, the "memory full' status notification acquired by the CPU 1 of the host computer 2500 in Ueda is sent from the CPU 12 of the printing apparatus notifying the status of the intermediate code memory 501. The CPU 12 and the intermediate code memory 501 are both internal parts of the printing apparatus, not "external" parts. When the CPU 1 neither acquires "the image data" nor acquires the data from "the external apparatus," it is a completely different structure than the claimed second data acquiring unit that both acquires "the image data" and acquires such data from "the external apparatus."

Further, the claimed second data acquiring unit is an element of the claimed printing apparatus. However, the CPU 1 of Ueda, which the Examiner cited as corresponding to the claimed second data acquiring unit, is part of the host computer 2500, rather than the printing apparatus. An apparatus that is a part of the host computer cannot possibly correspond to an element of the printing apparatus.

Ueda fails to disclose or suggest the claimed "storage unit," the claimed "judgment unit" and the claimed "second data acquiring unit." Kajita does not cure these deficiencies in Ueda and are not cited by the Examiner as showing these features missing from Ueda. Further, the Examiner has also failed to allege that theses features are inherent in any of the cited references. Accordingly, the Examiner has failed to address all of the claim terms, and has therefore failed to provide a prima facie case of obviousness.

Consequently, claim 1 is allowable over the combination of Ueda and Kajita. Claims 17 and 18 are allowable because they cover the same invention in just a different form – a method of use and a computer-readable program, respectively. The remaining claims are allowable due at least to their respective dependencies to claim 1.

B. Claims 8, 9, 16 and 22 stand rejected under 35 U.S.C. §103(a) over Ueda and Kajita in view of Iwazaki.

Claims 8, 9, 16 and 22 stand rejected under 35 U.S.C. §103(a) over Ueda and Kajita in view of Iwazaki. Claims 8, 9, 16 and 22 all depend from allowable claim 1. Because Iwazaki, which was cited only for its alleged disclosure of an external apparatus that functions as a mail server,

Application No.: 10/799,758 8 Docket No.: 325772034700

fails to overcome the deficiencies of Ueda and Kajita, claims 8, 9, 16 and 22 are allowable due at least to its dependency on allowable claim 1.

C. Claim 18 stand rejected under 35 U.S.C. §101.

The Examiner raised this rejection for the first time in the final Action even though claim 18 had been one of Appellants' original claims. Appellants tried to amend claim 18 as proposed by the Examiner for the first time in the final Action, but the Examiner refused to enter the amendment. Appellants not only did not have an adequate opportunity to amend claim 18 in accordance with the Examiner's proposal, but further believe that claim 18 is allowable as it is currently written.

The Supreme Court has identified the standard for patentable subject matter in *Bilski v. Kappos.* A computer program that is tied to a machine is patentable subject matter under the "machine or transformation" test, but even without being tied to a machine, a program is not *per se* unpatentable subject matter. 2010 WL 2555192 (2010). Claim 18 is directed to "a program that is run in *an image processing apparatus.*" In other words, mere abstract ideas without being implemented in "an image processing apparatus" are outside the scope of the claim 18. Only those that are *tied* to "an image processing apparatus" are within the scope of the claim 18. Therefore, claim 18 covers patentable subject matter even under the "machine or transformation test."

VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A. As indicated above, the claims in Appendix A do not include the amendment(s) filed on March 15, 2010.

IX. EVIDENCE

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above, or copies of decisions in related proceedings are not provided, hence no Appendix is included.

Dated: July 14, 2010

Respectfully submitted,

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Application No.: 10/799,758 10 Docket No.: 325772034700

APPENDIX A

Claims Involved in the Appeal of Application Serial No. 10/799,758

- An image processing apparatus for transmitting and receiving data to/from an external apparatus that has a storage apparatus, the image processing apparatus comprising:
 - a first data acquiring unit that acquires image data to be subjected to image processing;
 - a storage unit that stores the acquired image data;
- a transmission unit that transmits the acquired image data to the external apparatus so that the transmitted image data is stored in the storage apparatus thereof while the storage unit stores the acquired image data;
- a judgment unit that judges, prior to commencement of the image processing, whether the image data is stored in the storage unit;
- a second data acquiring unit that acquires the image data from the external apparatus if the judgment unit judges negatively; and
- an image processing unit that executes the image processing using the image data stored in the storage unit if the judgment unit judges positively, and executes the image processing using the image data acquired by the second data acquiring unit if the judgment unit judges negatively.
- The image processing apparatus of Claim 1 further comprising a deletion instructing unit that, after the image

processing is completed, sends to the external apparatus an instruction to delete the image data from the storage apparatus.

3. The image processing apparatus of Claim 1, wherein

the transmission unit transmits the acquired image data page by page to the external apparatus.

Application No.: 10/799,758 11 Docket No.: 325772034700

4. The image processing apparatus of Claim 3, wherein

the storage unit has a capacity only sufficient to store one page of the image data, and
each time the image processing unit completes image processing for one page of the image
data stored in the storage unit, the second data acquiring unit acquires from the external apparatus
another one page of the image data to be subjected to the image processing next.

The image processing apparatus of Claim 1 further comprising a memory that stores information regarding progress of the image processing, wherein

when executing the image processing using the image data acquired by the second data acquiring unit, the image processing unit refers to the information stored in the memory and executes the image processing for a part of the image data that has not been subjected to the image processing yet.

6. The image processing apparatus of Claim 5, wherein

the information stored in the memory indicates pages of the image data that have already been subjected to the image processing.

- The image processing apparatus of Claim 5, wherein the memory is a nonvolatile memory.
- 8. The image processing apparatus of Claim 1, wherein the external apparatus functions as a mail server, the transmission unit transmits to the external

apparatus an electronic mail addressed to the image processing apparatus and containing the acquired image data, and

the second data acquiring unit, if the judgment unit judges negatively, acquires the electronic mail from the external apparatus and extracts the image data from the acquired electronic mail.

9. The image processing apparatus of Claim 8, wherein the transmission unit converts the acquired image data into Tag Image File Format, and transmits to the external apparatus an electronic mail addressed to the image processing apparatus and containing the image data having been converted into Tag Image File Format, as an attached file.

- 10. The image processing apparatus of Claim 1, wherein the storage unit is a volatile memory.
- 11. The image processing apparatus of Claim 1, wherein the judgment unit judges whether the image data is stored in the storage unit each time power is turned on or each time the image processing apparatus recovers from a power failure.
 - 12. The image processing apparatus of Claim 11 further comprising:
- a reception unit that receives image processing jobs each of which contains information specifying a start time at which an image processing job is to be subjected to the image processing; and

a start time judging unit that judges, each time power is turned on or each time the image processing apparatus recovers from a power failure, whether any of the image processing jobs received by the reception unit has a start time that has already reached, wherein

if the judgment unit judges negatively, and if there is an image processing job that has been judged by the start time judging unit as having a start time that has already reached, the second data acquiring unit acquires image data for the image processing job from the external apparatus earlier than image data for the remaining image processing jobs received by the reception unit.

- 13. The image processing apparatus of Claim 1, wherein the image processing is an image forming process.
- 14. The image processing apparatus of Claim 1, wherein the image processing is a fax transmission process.
- 15. The image processing apparatus of Claim 1, wherein

the first data acquiring unit is a receiving unit that receives print data from an external terminal connected with the image processing apparatus via a network.

13 Docket No.: 325772034700

Application No.: 10/799,758

16. The image processing apparatus of Claim 1, wherein

the first data acquiring unit is a fax receiving unit that receives fax data from an external fax apparatus.

- 17. An image processing method for use in an image processing apparatus that is operable to transmit and receive data to/from an external apparatus that has a storage apparatus, the image processing method comprising:
 - a first data acquiring step for acquiring image data to be subjected to image processing;
 - a storage step for storing the acquired image data in a storage unit;
- a transmission step for transmitting the acquired image data to the external apparatus so that the transmitted image data is stored in the storage apparatus while the storage unit stores the acquired image data;
- a judgment step for judging, prior to commencement of the image processing, whether the image data is stored in the storage unit;
- a second data acquiring step for acquiring the image data from the external apparatus if the judgment unit judges negatively; and
- an image processing step for executing the image processing using the image data stored in the storage unit if the judgment unit judges positively, and executing the image processing using the image data acquired by the second data acquiring step if the judgment step judges negatively.
- 18. A program that is run in an image processing apparatus that is operable to transmit and receive data to/from an external apparatus that has a storage apparatus, the program stored in a memory of and causing the image processing apparatus to execute:
 - a first data acquiring step for acquiring image data to be subjected to image processing;
 - a storage step for storing the acquired image data in a storage unit;

a transmission step for transmitting the acquired image data to the external apparatus so that the transmitted image data is stored in the storage apparatus while the storage unit stores the acquired image data;

- a judgment step for judging, prior to commencement of the image processing, whether the image data is stored in the storage unit;
- a second data acquiring step for acquiring the image data from the external apparatus if the judgment unit judges negatively; and
- an image processing step for executing the image processing using the image data stored in the storage unit if the judgment unit judges positively, and executing the image processing using the image data acquired by the second data acquiring step if the judgment step judges negatively.
- 19. The image processing apparatus of claim 1, wherein the first data acquiring unit is an image reading unit which scans documents.
- 20. The image processing apparatus of claim 1, wherein the storage unit stores image data expanded based on the image data acquired by the first data acquiring unit.
 - 21. The image processing apparatus of claim 1, wherein

the external apparatus is provided as a first-external apparatus,

the first data acquiring unit has a receiving unit that receives the image data from a second external apparatus,

the transmission unit transmits the acquired image data received from the second external apparatus to the first external apparatus, and

the image processing unit executes a printing process using the image data stored in the storage unit if the judgment unit judges positively, and executes the printing process using the image data acquired by the second data acquiring unit if the judgment unit judges negatively. Application No.: 10/799,758 15 Docket No.: 325772034700

22. The image processing apparatus of claim 1, wherein

the first data acquiring unit has an image reading unit that acquires image data through scanning a document,

the transmission unit transmits the acquired image data read by the image reading unit to the external apparatus, and

the image processing unit executes a fax transmission process using the image data stored in the storage unit if the judgment unit judges positively, and executes the fax transmission process using the image data acquired by the second data acquiring unit if the judgment unit judges negatively.